

Listing of All Claims Including Current Amendments

1. (Previously presented) A method of formulating a topical insulin composition comprising:

preparing a non-liposome multilamellar liquid crystal phosphatidylcholine non-polar carrier for topical administration; and mixing an insulin solution into said carrier to entrap said insulin within said carrier, wherein said insulin is stabilized at room temperature.
2. (Previously Presented) The method of claim 1, wherein preparing said carrier comprises:

combining a polyglycol having a molecular weight of 200 and polyglycol having a molecular weight of 400 to form a polyglycol mixture;

shaving said phosphatidylcholine into said polyglycol mixture to form a phosphatidylcholine solution; and

mixing said phosphatidylcholine solution until said phosphatidylcholine solution is clear.
3. (Original) The method of claim 2, wherein said phosphatidylcholine component is polyenylphosphatidylcholine-enriched phosphatidylcholine.
4. (Previously Presented) The method of claim 2, wherein said phosphatidylcholine solution comprises 45% w/w phosphatidylcholine, 50% w/w polyglycol having a molecular weight of 200, and 5% w/w polyglycol having a molecular weight of 400.
5. (Previously Presented) The method of claim 2, wherein preparing said carrier further comprises

warming said phosphatidylcholine solution to 40°C and milling said warmed solution;

combining siloxylated polyether and polydimethylsiloxane to form a fluid;

adding said fluid to said warmed solution carrier and milling until said solution is clear;

adding methyl paraben to said solution and milling until said methyl paraben dissolves in said solution;

warming water to 40°C and adding said warmed water slowly to said solution; and

ceasing milling of said solution and sweeping said solution to cool to room temperature.

6. (Previously Presented) The method of claim 5, wherein said carrier comprises 53.25% w/w phosphatidylcholine solution, 1.00% w/w siloxylated polyether , 1.00% w/w polydimethylsiloxane , 0.75% w/w methyl paraben, and 44.00% w/w water.

7. Cancelled

8. (Previously Presented) The method of claim 6, wherein said siloxylated polyether is dimethyl, methyl(propylpolyethylene oxide propylene oxide, acetate) siloxane.

9. Cancelled

10. Cancelled

11. (Original) The method of claim 1, wherein said insulin solution is human recombinant insulin prepared in 0.01 N HCl.

12. (Original) The method of claim 11, wherein said insulin is prepared in 0.01 N HCl at 50 mg/ml.

13. (Original) The method of claim 1, said insulin solution is mixed into said carrier at room temperature for at least one hour.

14. (Original) The method of claim 1, said insulin solution is mixed into said carrier to obtain said insulin composition having a concentration of 20 mg/ml.

15 (Previously Presented) The method of claim 1, wherein preparing said carrier comprises:

providing a polyglycol;

shaving phosphatidylcholine into said polyglycol to form a phosphatidylcholine solution; and

mixing said phosphatidylcholine solution until said phosphatidylcholine solution is clear.

16. (Previously Presented) The method of claim 15, wherein preparing said carrier further comprises

warming said phosphatidylcholine solution to 40°C and milling said warmed solution;

combining siloxylated polyether and polydimethylsiloxane to form a fluid;

adding said fluid to said warmed solution carrier and milling until said solution is clear;

adding methyl paraben to said solution and milling until said methyl paraben dissolves in said solution;

warming water to 40°C and adding said warmed water slowly to said solution; and

ceasing milling of said solution and sweeping said solution to cool to room temperature.